Welcome to STN International! Enter x:x

LOGINID:ssptasxm1624

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS
        JAN 16
NEWS
                 CA/CAplus Company Name Thesaurus enhanced and reloaded
     3
         JAN 16
                 IPC version 2007.01 thesaurus available on STN
NEWS
         JAN 16
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS
NEWS
         JAN 22
                 CA/CAplus updated with revised CAS roles
NEWS
     7
         JAN 22
                 CA/CAplus enhanced with patent applications from India
         JAN 29
NEWS
     8
                 PHAR reloaded with new search and display fields
        JAN 29
NEWS 9
                 CAS Registry Number crossover limit increased to 300,000 in
                 multiple databases
                 PATDPASPC enhanced with Drug Approval numbers
NEWS 10
        FEB 15
NEWS 11
        FEB 15
                 RUSSIAPAT enhanced with pre-1994 records
                 KOREAPAT enhanced with IPC 8 features and functionality
NEWS 12
        FEB 23
NEWS 13
        FEB 26
                 MEDLINE reloaded with enhancements
                 EMBASE enhanced with Clinical Trial Number field
NEWS 14
        FEB 26
NEWS 15
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NEWS 16
        FEB 26
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NEWS 17
        FEB 26
                CAS Registry Number crossover limit increased from 10,000
                 to 300,000 in multiple databases
       MAR 15
NEWS 18
                WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19
        MAR 16
                CASREACT coverage extended
NEWS 20 MAR 20 MARPAT now updated daily
NEWS 21 MAR 22 LWPI reloaded
NEWS 22 MAR 30 RDISCLOSURE reloaded with enhancements
NEWS 23 MAR 30
                INPADOCDB will replace INPADOC on STN
NEWS 24 APR 02
                JICST-EPLUS removed from database clusters and STN
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
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Enter NEWS followed by the item number or name to see news on that specific topic.

Welcome Banner and News Items

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For general information regarding STN implementation of IPC 8

FILE 'HOME' ENTERED AT 09:45:06 ON 21 APR 2007

NEWS LOGIN

NEWS IPC8

SINCE FILE TOTAL - ENTRY SESSION

FULL ESTIMATED COST

0.21 0.21

FILE 'REGISTRY' ENTERED AT 09:45:15 ON 21 APR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 20 APR 2007 HIGHEST RN 931582-00-2 DICTIONARY FILE UPDATES: 20 APR 2007 HIGHEST RN 931582-00-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\10518815.str



chain nodes :
10 11
ring nodes :
1 2 3 4 5 6 7 8 9

chain bonds : 2-10 7-11 ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9

exact/norm bonds : 5-7 6-9 7-8 7-11 8-9

exact bonds :

2-10

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

G1:C,H,Cb,Cy,Hy,Ak

Match level :

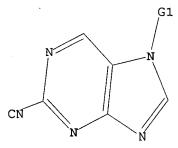
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 C, H, Cb, Cy, Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sam

SAMPLE SEARCH INITIATED 09:45:32 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 33 TO ITERATE

100.0% PROCESSED 33 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

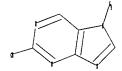
BATCH **COMPLETE**

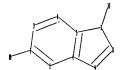
PROJECTED ITERATIONS: 316 TO 1004

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

Uploading C:\Program Files\Stnexp\Queries\10518815a.str





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chain nodes :
10 11
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
2-10 7-11
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9
exact/norm bonds :
5-7 6-9 7-8 7-11 8-9
exact bonds :
2-10
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :
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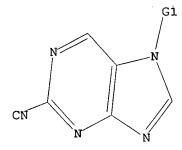
G1:C,H,Cb,Cy,Hy,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS

L3 STRUCTURE UPLOADED

=> d 13 L3 HAS NO ANSWERS L3 STR



G1 C, H, Cb, Cy, Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 13 sam

SAMPLE SEARCH INITIATED 09:46:34 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -

100.0% PROCESSED

33 ITERATIONS

0 ANSWERS

8 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

316 TO 1004

PROJECTED ANSWERS:

0 TO

L4

0 SEA SSS SAM L3

=> s 13 full

FULL SEARCH INITIATED 09:46:42 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 700 TO ITERATE

100.0% PROCESSED

SEARCH TIME: 00.00.01

8 SEA SSS FUL L3

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

173.00 173.21

FILE 'CAPLUS' ENTERED AT 09:46:47 ON 21 APR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

700 ITERATIONS

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FILE COVERS 1907 - 21 Apr 2007 VOL 146 ISS 18 FILE LAST UPDATED: 20 Apr 2007 (20070420/ED)

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=> s 15

L6 11 L5

=> d l6 ibib hitstr abs 1-11

L6 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1004719 CAPLUS

DOCUMENT NUMBER: 143:286448

TITLE: Preparation of fused bicyclic pyrimidine compounds as

cathepsin K inhibitors

INVENTOR(S): Ohmoto, Kazuyuki; Hisaichi, Katsuya; Okuma, Motohiro;

Tanaka, Makoto; Kawada, Naoki

PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 168 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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			co,															
			GH,															
			LR,			-	•	•	-			•	•			•		
			NZ,															
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PRIO	RITY API											6821				0040	310	
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IT	864438	-87-9	P				•											
	RL: PAG																	
	(Thera	peuti	c us	e);	BIOL	(Bi	olog.	ical	stu	dy);	PRE	P (P:	repa	rati	on);	USE	s	
	(Uses)																	
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		trea				eopo	resi	s, a	rthr	itis	, et	c.)						
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CN	1H-Pur	ine-2	-car	boni	tril	e, 6	- [(2	, 2-d	imet	hylp	ropy	1)am	ino]	- (9	CI)	(CA	IND	EX

 Me_3C-CH_2-NH

NAME)

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of fused bicyclic pyrimidine compds. as cathepsin K inhibitors for treatment of osteoporesis, arthritis, etc.)

95121-05-4 CAPLUS RN

CN 1H-Purine-2-carbonitrile (9CI) (CA INDEX NAME)

GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- Title compds. I [ring A = carbocycle, heterocycle; ring B = heterocycle AB having at least one nitrogen; dotted line indicates single or double bond.; Y, Z = C, N; n = 0-10; R = H, substituent; further details on R are given.] were prepared For example, reaction of 5-(aminomethyl)-4-[(2,2dimethylpropyl)amino]-2-pyrimidinecarbonitrile, e.g., prepared from 2,4-dichloro-5-(chloromethyl)pyrimidine in 4 steps, with N,N'-carbonyldiimidazole afforded compound II. In cathepsin K inhibition assays, the IC50 value of compound III was 2.9 nM. Compds. I are claimed useful for the treatment of osteoporosis, arthritis, etc. Formulations are given.

REFERENCE COUNT: THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS 34 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:991509 CAPLUS

DOCUMENT NUMBER:

140:42192

TITLE:

Preparation of purinone derivatives as

dipeptidylpeptidase IV (DPP-IV) inhibitors

INVENTOR(S):

Yoshikawa, Seiji; Emori, Eita; Matsuura, Fumiyoshi;

Richard, Clark; Ikuta, Hironori; Kira, Kazunobu;

Yasuda, Nobuyuki; Nagakura, Tadashi; Yamazaki, Kazuto Eisai Co., Ltd., Japan

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 376 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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EP 1514552
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                                                                      20021023
                                              CN 2003-818968
                                                                   A3 20030603
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                                              WO 2003-JP7010
                                                                   W
                                                                      20030603
                                              US 2003-457002
                                                                   B1 20030606
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OTHER SOURCE(S):

MARPAT 140:42192

IT 635719-97-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of purinone derivs. as dipeptidylpeptidase IV inhibitors)

RN 635719-97-0 CAPLUS

CN 1H-Purine-2-carbonitrile, 7-(2-butynyl)-6,7-dihydro-6-oxo-8-(1-piperazinyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 635719-96-9 CMF C14 H15 N7 O

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

AB The title compds. I [wherein T1 is an optionally substituted, monocyclic or bicyclic, 4- to 12-membered, heterocyclic group containing one or two nitrogen atoms in the ring; X is optionally substituted C1-6 alkyl, etc.; Z1 and Z2 each independently is nitrogen, CR2; and R1 and R2 each independently is hydrogen, optionally substituted C1-6 alkyl, optionally substituted C1-6 alkoxy, etc.] are prepared Compds. of this invention in vitro showed IC50 values of 0.001 μM to 1.48 μM against dipeptidylpeptidase IV.

REFERENCE COUNT:

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:220605 CAPLUS

DOCUMENT NUMBER:

136:263385

TITLE:

Preparation of purine derivs. as adenosine A2a

receptor agonists for pharmaceutical use as

anti-inflammatory agents

INVENTOR(S):

Mantell, Simon John; Stephenson, Peter Thomas

Pfizer Limited, UK; Pfizer Inc.

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 161 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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OTHER SOURCE(S): MARPAT 136:263385

IT 264608-18-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of purine derivs. as adenosine A2a receptor agonists for pharmaceutical use as antiinflammatory agents)

264608-18-6 CAPLUS RN

CN 1H-Purine-2-carbonitrile, 6-[(2,2-diphenylethyl)amino]- (9CI)

Ph2CH-CH2-NH

GI

NHCH2CHPh2 028 Me

Me Me он он

AB Purine derivs., such as I [R1 = H, alkyl, arylalkyl, etc.; R2 = alkylenylsulfonylaminomethyl; R19 = C-linked heteroaryl], were prepared for therapeutic use as anti-inflammatory agents which are adenosine A2a receptor agonists for treatment of conditions, such as bronchitis, inflammatory bowel disease and peripheral vascular disease. Thus, purine II was prepared via a multistep synthetic sequence starting from (3R, 4R, 5R) -5-(2-ethyl-2H-tetrazol-5-yl) tetrahydro-2,3,4-furantriol triacetate (ester), 2-methyl-1-propanesulfonyl chloride, 2,6-dichloropurine, and 2,2-diphenylethylamine. The prepared purine derivs. were tested for anti-inflammatory activity by their ability to inhibit neutrophil function which is indicative of A2a receptor agonist activity. REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ΙI

ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN L6

ACCESSION NUMBER: 2002:10495 CAPLUS

DOCUMENT NUMBER:

136:70047

Ι

TITLE:

Preparation of purine nucleosides as anti-inflammatory

adenosine A2a receptor agonists

INVENTOR(S):

Mantell, Simon John; Monaghan, Sandra Marina;

Stephenson, Peter Thomas

PATENT ASSIGNEE(S):

Pfizer Limited, UK; Pfizer Inc.

SOURCE:

PCT Int. Appl., 176 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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		2002																
	WO																CH,	
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		1296	996			${f T}$	2004	0831		PT	20	01-9	9384	90		2	0010	614
		2220				Т3		1216									0010	614
	US	2002	0321	68		` A1		0314									0010	619
	US	6921	753			B2	2005	0726										
		1071				Α		0731		ВG	20	02-	1071	71		2	0021	007
	IN	2002	MN01	404		Α	2004	0904		IN	20	02-1	MN14	04		2	0021	010
	ZA	2002	0095	57		Α	2003	1202		ZA	20	02-	9557			2	0021	125
	NO	2002	0059	75		Α	2002	1212		ИО	20	02-	5975			2	0021	212
		2004					2004	1118		US	20	04-	8693	80		2	0040	615
PRIO	RIT	Y APP	LN.	INFO	.: .					GB	20	00-	1572	7		A 2	0040	627
										US	20	00-3	2184	66P		P 2	0000	714
										WO	20	01-	IB10	64		W 2	0010	-
										US	20	01-	8842	44		A3 2	0010	619

OTHER SOURCE(S): MARPAT 136:70047

264608-18-6P 383888-23-1P IT

> RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of purine nucleosides as antiinflammatory adenosine aa receptor agonists)

264608-18-6 CAPLUS RN

1H-Purine-2-carbonitrile, 6-[(2,2-diphenylethyl)amino]- (9CI) CNNAME)

Ph₂CH-CH₂-NH

RN 383888-23-1 CAPLUS

CN 1H-Purine-2-carbonitrile, 6-[(1-naphthalenylmethyl)amino]- (9CI) (CA INDEX NAME)

GI

$$R^{5}$$

OH

NHR1

N

R2

R3

X-N

Y

R4

The present invention relates to purine nucleosides I wherein R1, R2 are AΒ independently H, substituted alkyl; R3 is H, alkyl, cycloalkyl, benzyl, R4 is alkyl, cycloalkyl; R3R4 together with nitrogen represent azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, homopiperidinyl or homopiperazinyl, each being optionally substituted on a ring nitrogen or carbon atom by alkyl or cycloalkyl; R5 is CH2OH, substituted amide; X is CH2, CH2Ch2; Y is CO, CS, SO2, C:N(CN), and pharmaceutically acceptable salts and solvates thereof, to processes for the preparation of, intermediates used in the preparation of, and compns. containing such compds. and the uses of such compds. as adenosine A2a receptor agonists. Thus, N-(9-[(2R,3R,4S,5R)-3,4-dihydroxy-5-(hydroxymethyl)tetrahydro-2-furanyl]-6-[(2,2-diphenylethyl)amino]-9H-purin-2-yl}methyl)-N'-[2-(diisopropylamino)ethyl]urea was prepared as adenosine A2a receptor agonist. Title compds. were tested for anti-inflammatory activity by their ability to inhibit neutrophil function (which indicates A2a receptor agonist activity) and all had an IC50 $< 1 \mu M$. REFERENCE COUNT: THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

L6 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:904207 CAPLUS

DOCUMENT NUMBER: 136:37902

TITLE: Preparation of 2-aminocarbonyl-9H-purine nucleosides

and their uses in treatment of respiratory disease, as

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

A2a receptor agonists and anti-inflammatory agents

INVENTOR(S): Mantell, Simon John; Stephenson, Peter Thomas

PATENT ASSIGNEE(S): Pfize

Pfizer Limited, UK; Pfizer Inc.

SOURCE:

PCT Int. Appl., 198 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

TANCHACE.

English

LANGUAGE:

Engi

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

WO 2001094368 A7 PATENT NO. KIND DATE APPLICATION NO. -----A1 20011213 WO 2001-IB973 20010605 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 20050201 TW 2001-90113146 20010531 20011213 CA 2001-2414018 20010605 TW 227240 В CA 2414018 A1 US 2001-874007 US 2002058641 **A1** 20020516 20010605 US 6753322 B2 20040622 EP 2001-934242 EP 1292604 A1 20010605 20030319 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, TE, S1, L1, L2, L2, L2, BR 2001011263 A 20030617 BR 2001-11200 CN 1434830 A 20030806 CN 2001-810802 20010605 HU 200301330 A2 20030828 HU 2003-1330 20010605 JP 2003535871 T 20031202 JP 2002-501916 20010605 NZ 522184 A 20040528 NZ 2001-522184 20010605 EE 200200678 A 20040615 EE 2002-678 20010605 CN 1810822 A 20040615 EE 2002-678 20010605 BG 107216 A 20030530 BG 2002-107216 20021023 IN 2002MN01540 A 20050304 IN 2002-MN1540 20021023 IN 2002MN01540 A 20050304 IN 2002-MN1540 20021031 NO 2002005821 A 20030204 NO 2002-5821 20021204 ZA 200209875 A 20031205 ZA 2002-9875 20021205 HK 1054042 A1 20060901 HK 2003-106312 20030905 US 2004077584 A1 20040422 US 2003-676782 20031001 US 7094769 B2 20060822 US 2006122145 A1 20060608 US 2006-334144 20060117 IN 2006MN00139 A 20061006 IN 2006-MN139 20060206 PRIORITY APPLN. INFO.:

GB 2000-14048 A 20000626 PRIORITY APPLN. INFO.:

GB 2000-24920 A 20000627 P 20000627 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR A 20001011

US 2000-214307P P 20000627

US 2000-225236P P 20000815

US 2000-245243P P 20001102

CN 2001-810802 A3 20010605

US 2001-874007 A3 20010605

WO 2001-IB973 W 20010605

IN 2002-MAIR C IN 2002-MN1540 A3 20021031 US 2003-676782 A3 20031001

OTHER SOURCE(S): MARPAT 136:37902

IT 264608-18-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 2-aminocarbonyl-9H-purine nucleosides and uses in treatment of respiratory disease, as A2a receptor agonists and anti-inflammatory agents)

RN 264608-18-6 CAPLUS

CN 1H-Purine-2-carbonitrile, 6-[(2,2-diphenylethyl)amino]- (9CI) (CA INDEX NAME)

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

2-Aminocarbonyl-9H-purine nucleosides I wherein R, R2 are independently H, alkyl; R1 is H, substituted alkyl, fluorenyl; R3 is H, alkyl, cycloalkyl, benzyl; R4 is substituted azetidin-3-yl, pyrrolidin-3-yl, piperidin-3-yl, piperidin-4-yl, homopiperidin-3-yl or homopiperidin-4-yl; R3R4 taken together with the nitrogen atom to which they are attached, represent azetidinyl, pyrrolidinyl, piperidinyl, piperazinyl, homopiperidinyl or homopiperazinyl, each being optionally substituted on a ring nitrogen or carbon atom by alkyl or cycloalkyl; R5 is CH2OH, amide; X is substituted alkylene; RX or R2X with the nitrogen atom to which they are attached , represent azetidin-3-yl, pyrrolidin-3-yl, piperidin-3-yl, piperidin-4-yl, homopiperidin-3-yl or homopiperidin-4-yl; Y is CO, CS, SO2, C=N(CN); were prepared as A2a receptor agonists and anti-inflammatory agents. Thus, nucleoside II was prepared and tested as A2a receptor agonist and anti-inflammatory agent. Title compds. were tested for biol. activity as A2a receptor agonists and anti-inflammatory agents and all were found to have an IC50 of less than 100 nM.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:618013 CAPLUS

DOCUMENT NUMBER:

135:180928

TITLE:

Preparation of adenosine derivatives for

pharmaceutical use as adenosine A2a receptor agonists

INVENTOR (S):

Mantell, Simon John; Monoghan, Sandra Marina;

Stephenson, Peter Thomas

PATENT ASSIGNEE(S):

Pfizer Limited, UK; Pfizer Inc.

SOURCE:

PCT Int. Appl., 121 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

LANGUAGE: FAMILY ACC. NUM. COUNT:

Patent English

PATENT INFORMATION:

PAT	CENT :	NO.			KIN)	DATE		;	APPL:	ICAT:	ION 1	NO.		D	ATE	
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WO	2001	0608	35		A1		2001	0823	1	WO 20	001-	IB16'	7		20	0010	209
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		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
		SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,
		YU,	ZA,	ZW													
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	ΝL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG		
CA	2400619				A1		2001	0823		CA 2	001-	2400	619		20	0010	209
ΑU	J 200130440				Α		2001	0827		AU 2	001-	3044	0		20	0010	209
EΡ	1255764				A1		2002	1113		EP 20	001-	9025	83		20	0010	209

EP	1255	764			В1	2	2006	0510									
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HU	2003	0105	5		A2	2	2003	0828]	ΗU	2003	-1055	5		2	0010	209
EE	2002	0045	2		Α	2	2003	1215]	EΕ	2002	-452			2	0010	209
JP	2004	5082	84		T	2	2004	0318		JP	2001	-5602	219		2	0010	209
NZ	5199	71			Α	2	2004	0430]	NZ	2001	-5199	71		2	0010	209
AT	3258	07			${f T}$	2	2006	0615	7	AΤ	2001	-9025	83		2	0010	209
ES	2260	199			Т3	2	2006	1101]	ES	2001	-1902	2583		2	0010	209
US	2001	0200	89		A1	2	2001	0906	1	US	2001	-7892	236		2	0010	220
US	6525	032			B2	2	2003	0225									
BG	1069	06			Α	2	2003	0430	3	BG	2002	-1069	906		2	0020	705
ZA	2002	0065	26		Α	2	2003	1016	;	ZA	2002	-6526	5		2	0020	815
NO	2002	0038	94		Α	_ 2	2002	1001]	ОИ	2002	-3894	Į.		2	0020	816
PRIORIT	APP	LN.	INFO	.:					(GB	2000	-3960)		A 2	0000	218
									1	US	2000	-1886	548P		P 2	0000	310
									1	WO	2001	-IB16	57	,	W 2	0010	209

OTHER SOURCE(S): MARPAT 135:180928

IT 264608-18-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of adenosine derivs. for pharmaceutical use as adenosine A2a receptor agonists)

RN 264608-18-6 CAPLUS

CN 1H-Purine-2-carbonitrile, 6-[(2,2-diphenylethyl)amino]- (9CI) (CA INDEX NAME)

GI

AB Adenosines, such as I [A = bond, alkylene connecting group; R1 = H, alkyl, cycloalkyl, arylalkyl, etc.; R2 = H, Ph, naphthyl, alkyl, cycloalkyl, amino, alkyloxy, carboxy, acyloxy, sulfonyl, aminosulfonyl, acylamino, etc.; R7 = H, Ph, naphthyl, heterocyclyl, alkyl, cycloalkyl, etc.; R8 = H, alkyl], were prepared for therapeutic use as adenosine A2a receptor agonists for the treatment of a variety of conditions, such as respiratory disease, inflammation, vascular disease, and psychotic disorders. Thus, adenosine

derivative II was prepared via a multistep synthetic sequence starting from 2,6-dichloropurine, 1-piperidineethanamine, 2,2-diphenylethanamine and Me 2,3-O-(1-methylethylidene)- β -D-ribofuranosiduronic acid. Formulation for delivery of the prepared adenosine derivs. were discussed, but no adenosine A2a receptor activity data was presented.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

4

ACCESSION NUMBER: 2001:283973 CAPLUS

DOCUMENT NUMBER: 134:296047

TITLE: Preparation of purine nucleosides as adenosine A2a

receptor agonists

INVENTOR(S): Monaghan, Sandra Marina

PATENT ASSIGNEE(S): Pfizer Limited, UK; Pfizer Inc.

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:
FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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	2001															20001	
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		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP	, KR	KZ,	LC,	LK,	LR	, LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX	, MZ	NO,	NZ,	PL,	PΊ	, RO,	RU,
		SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR	, TT	TZ,	UA,	UG,	US	, UZ,	VN,
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		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	ΙΊ	LU	MC,	NL,	PT,	SE	, BF,	ВJ,
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CA	2387															20001	006
	2387				С		2007	0313									
BR	2000	0147	60		Α		2002	0702		BR	2000	-1476	0			20001	006
EP	1220	862			A1		2002	0710		ΕP	2000	-9627	73			20001	006
EP	1220	862															
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							RO,										
TR	2002	0100	1		T2		2002	0923		TR	2002	-1001				20001	006
JP	2003	5114	60		\mathbf{T}		2003	0325		JP	2001	-5303	49			20001	006
HU	2002	0348	5		A2							-3485				20001	006
EE	2002	0019	4		Α							-194				20001	006
ΑU	7715	31			B2		2004	0325		ΑU	2000	-7441	2			20001	006
NZ	5172 3210	94			Α					NZ	2000	-5172	94			20001	006
AΤ	3210	65			T		2006	0415		AT	2000	-9627	73			20001	006
ES	2257	317					2006	0801		ES	2000	-9627	73			20001	006
US	6448	236			B1		2002	0910		US	2000	-6884	97			20001	016
IN	2002	00MM	242		Α		2006	0203		IN	2002	-MN24	2			20020	226
BG	1065	67			Α		2002	1229		ВG	2002	-1065	67			20020	402
ZA	2002	0027	25		Α		2003	0408		ZA	2002	-2725				20020	408
NO	2002	0017	51		Α		2002									20020	
HK	1047	942			A1		2225	0401				-1001				20030	
ORIT	Y APP	LN.	INFO	.:	•					GB	1999	-2436	1		Α	19991	014
										WO	2000	-IB14	46		W	20001	.006
ER S	OURCE	(S) ·			MAR	РΔТ	134.	2960	47								

OTHER SOURCE(S): MARPAT 134:296047

IT 264608-18-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of purine nucleosides as adenosine aa receptor agonists)

RN 264608-18-6 CAPLUS

CN 1H-Purine-2-carbonitrile, 6-[(2,2-diphenylethyl)amino]- (9CI) (CA INDEX NAME)

GI

and

$$R-NH$$

O

HO

OH

AB The present invention relates to nucleosides I wherein R is Me, Et or cyclopropylmethyl; R1 is hydrogen or alkyl optionally substituted by 1 or 2 substitutents each independently selected from substituted Ph and substituted naphthyl; A is a bond or alkylene; R2 is hydrogen, alkyl, cycloalkyl, substituted Ph or substituted naphthyl, and pharmaceutically acceptable salts and solvates thereof, to processes for the preparation of, intermediates used in the preparation of, and compns. containing such compds.

Ι

the uses of such compds. as adenosine A2a receptor agonists. Thus, (2S,3S,4R,5R)-5-{2-{[(benzylsulfonyl)amino]methyl}-6-[(2,2-diphenylethyl)amino]-9H-purin-9-yl}-N-ethyl-3,4-dihydroxytetrahydro-2-furancarboxamide was prepared as adenosine A2a receptor agonist (no data).

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:283972 CAPLUS

DOCUMENT NUMBER: 134:281075

TITLE: Preparation of purine nucleosides as adenosine A2a

receptor agonists

INVENTOR(S): Monaghan, Sandra Marina

PATENT ASSIGNEE(S): Pfizer Limited, UK; Pfizer Inc.

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	FENT :	NO.			KIN)	DATE			APPL	CAT:	ION 1	. 00		Dž	ATE	
WO	2001	0271	30		A1	-	2001	0419		WO 20	000-	IB14	· 4 4		2	0001	006
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		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,

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HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
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             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2387531
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                           С
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                           В1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     TR 200200985
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                                              TR 2002-985
                                                                      20001006
     HU 200203483
                           A2
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                                 20030325
                                              JP 2001-530348
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                                 20030515
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                                 20031031
                                              NZ 2000-515323
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     ES 2193990
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                                 20031116
                                              ES 2000-964566
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     AU 768308
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                                              AU 2000-75488
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     US 6350735
                                 20020226
                                              US 2000-688624
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     BG 106569
                                              BG 2002-106569
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                                 20021229
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                                              NO 2002-1692
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     ZA 2002002849
                                 20030411
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PRIORITY APPLN. INFO.:
                                              GB 1999-24363
                                                                      19991014
                                              WO 2000-IB1444
                                                                   W
                                                                      20001006
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OTHER SOURCE(S):

MARPAT 134:281075

IT 264608-18-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of purine nucleosides as adenosine A2a receptor agonists)

RN 264608-18-6 CAPLUS

CN 1H-Purine-2-carbonitrile, 6-[(2,2-diphenylethyl)amino]- (9CI) (CA INDEX NAME)

AB The present invention relates to compds. of the formula I wherein R1 is H, alkyl optionally substituted with aryl; A is a bond or alkylene; R2 is H, alkyl, cycloalkyl, substituted aryl; R3 is H, alkyl, cycloalkyl, Ph were as adenosine A2a receptor agonists. Thus, I (R1 = CHPh2, R2 = CHMe2, A = CH2) was prepared as antiinflammatory agent and as adenosine A2a receptor agonist (no data).

Ι

REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2000:900654 CAPLUS

DOCUMENT NUMBER:

134:56915

TITLE:

Preparation of purine nucleosides as antiinflammatory

agents

INVENTOR(S):

Mantell, Simon John; Monaghan, Sandra Marina

PATENT ASSIGNEE(S):

Pfizer Limited, UK; Pfizer, Inc. PCT Int. Appl., 93 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D .	DATE									ATE	
	2000 2000															0000	513
WO																	
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		ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,
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NZ 51	6094	A	20040730	NZ	2000-516094		20000613
IN 20	00MU00539	Α	20050304	IN	2000-MU539		20000613
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HR 20	01000927	A1	20030430	HR	2001-927		20011213
NO 20	01006109	A	20020215	NO	2001-6109		20011214
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HK 10	47111	A1	20050506	HK	2002-108621		20021129
US 20	05124574	A1	20050609	US	2005-42582		20050124
PRIORITY A	PPLN. INFO.:			GB	1999-13932	Α	19990615
				US	2000-590585	A3	20000608
				WO	2000-IB789	W	20000613

OTHER SOURCE(S):

MARPAT 134:56915

IT 264608-18-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of purine nucleosides as antiinflammatory agents)

RN 264608-18-6 CAPLUS

CN 1H-Purine-2-carbonitrile, 6-[(2,2-diphenylethyl)amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} NC & N & N \\ N & NH \\ \hline \\ Ph_2CH-CH_2-NH \\ \end{array}$$

GI

Nucleosides I (R1 = H, alkyl, arylalkyl; R2 = H, alkyl; R3 = H, alkyl, ester, CN, amide, cycloalkyl, Ph, naphthyl; A = alkylidene, imine, alkoxy, oxycarbonyl, sulfone, sulfonamide), and pharmaceutically acceptable salts and solvates thereof and to processes for the preparation of, intermediates used in the preparation of, compns. containing and the uses of, such compds. as adenosine A2a receptor agonists. Thus, I (R1 = CH2CHPh2, R2 = H, R3 = 1-piperidinyl, A = CH2CH2) was prepared and tested for its antiinflammatory activity by its ability to inhibit neutrophil function (IC50 < 1 μ M).

ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2000:277994 CAPLUS

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DOCUMENT NUMBER:

132:293979

TITLE:

Preparation of Adenine derivatives as neutrophil inhibitors, anti-inflammatory agents, and agonists of Adenosine A2 receptor

INVENTOR(S):

Monaghan, Sandra Marina; Mantell, Simon John

PATENT ASSIGNEE(S):

Pfizer Ltd., UK; Pfizer Inc. PCT Int. Appl., 166 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

SOURCE:

English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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			DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU	, MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
			CG,	CI,	CM,	GA,						, SN,						
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			ΙE,	SI,	LT,	LV,	FI,	RO,	CY									
	JP	2002	5275	24		${f T}$		2002	0827		JP	2000-	5771	83		1	9991	005
	JP	3602	445			B2		2004	1215									
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											GB	1999-	8931			A 1	9990	419
											WO	1999-	IB16	29		W 1	9991	005
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OTHER SOURCE(S): MARPAT 132:293979

264608-18-6P 264608-49-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of adenosine derivs. as neutrophil inhibitors, anti-inflammatory agent and agonists of adenosine A2 receptor)

RN264608-18-6 CAPLUS

CN1H-Purine-2-carbonitrile, 6-[(2,2-diphenylethyl)amino]- (9CI) NAME)

Ph₂CH-CH₂-NH

RN264608-49-3 CAPLUS

CN1H-Purine-2-carbonitrile, 6-(2-phenylethyl)- (9CI) (CA INDEX NAME)

GΙ

AB The present invention provides compds. of I (R1 = alkyl, cyclopropylmethyl; R2 = phenyl-alkylene, naphthyl-alkylene where the alkylene chain may be substituted with Me, Et, Ph, or naphthyl; n = 1, 2; A = NRa, NRaC(0), NRaC(0)NRa, NRaC(0)O, OC(0)NRa, C(0)NRa, NRaSO2, SO2NRa, O, S, SO2, in which Ra = H, alkyl; R3 = -(CH2)p-Rc-B, wherein p = 0, 1, 2; Rc = bond, alkylene, optionally alkyl-substituted cycloalkylene, phenylene, naphthylene; B = H, NRbRb, ORb, CO2Rb, OCORb, SO2Rb, CN, SO2NRbRb, NRbCORb, NRbSO2Rb, CONRbRb, in which Rb = same or different and selected from H, alkyl, Ph, benzyl) and pharmaceutically acceptable salts and solvates, together with processes for the preparation of, compns. containing,

uses of and intermediates used in the preparation of, such compds. that have adenosine A2 receptor agonist activity. Thus, I (R1 = OMe; R2 = 2.2-diphenylethyl; n = 1; A = NH; R3 = 2-phenylacetamide) and various derivs. were prepared and tested for their ability to inhibit neutrophil function and demonstrated submicromolar IC50 values.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:184635 CAPLUS

DOCUMENT NUMBER: 102:184635

TITLE: Theoretical investigation of acidity and isotope

exchange in purine nucleotide cations

AUTHOR(S): Boerth, Donald W.; Harding, Francis X., Jr.

CORPORATE SOURCE: Dep. Chem., Southeast. Massachusetts Univ., North

Dartmouth, MA, 02747, USA

SOURCE: Journal of the American Chemical Society (1985),

107(10), 2952-69

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: English

IT 95121-05-4

RL: PRP (Properties)

(electron d. and proton affinity of, MO calcn. of)

RN 95121-05-4 CAPLUS

CN 1H-Purine-2-carbonitrile (9CI) (CA INDEX NAME)

IT 95121-40-7

RL: PRP (Properties)

(electron d. of, MO calcn. of)

RN 95121-40-7 CAPLUS

CN 1H-Purine-2-carbonitrile, conjugate monoacid (9CI) (CA INDEX NAME)

● H+

Protonation of purine nucleotide models at N(7) and the C(8)H acidity of AB the purine cations were studied by semiempirical (INDO) and ab initio (STO-3G) MO calcns. performed on neutral, N(7)-protonated, and C(8)-deprotonated purine species. Factors associated with relative rates of C(8)H isotope exchange among different nucleotides were studied. Substituent effects for natural nucleotides, such as electron-donation or -withdrawal, stabilization or destabilization, were analyzed in the context of effects from the outer common electron-withdrawing and -releasing groups at C(2) and C(6). The calculated N(7) basicity of neutral purines shows guanine, adenine, and hypoxanthine to be among the strongest bases along with methyl- and methoxypurines. Xanthine and fluoro- or nitropurine are computed to be among the weakest bases of the group. Ionization at C(8)H was predicted to be the most facile for xanthine and fluoro- and nitropurines and least facile for adenine, guanine, hypoxanthine, dimethyladenine, and dimethylguanine. The predicted thermodn. ordering (xanthine > purine > hypoxanthine > adenine) is consistent with the observed exchange rate consts. for the nucleosides and nucleotides, but guanine is predicted to be thermodynamically the least susceptible to exchange. Anal. of charge distributions in the N(7) protonated species reveals that approx. 35% of the pos. charge appears at C(8)H. The magnitude of the charge appears to be a good indicator of the effect of substituents on C(8)H lability. The C(8)-deprotonated purines appear to be ylides, stabilized by π polarization, with little zwitterionic character. Both calculated proton affinities and C(8)H charges for the various C(2) - and C(6) - substituted purines show remarkably good correlations with standard Hammet σ values.

---Logging off of STN---

Executing the logoff script...

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SINCE FILE	TOTAL
ENTRY	SESSION
58.44	231.65
SINCE FILE	TOTAL
ENTRY	SESSION
-8.58	-8.58
	ENTRY 58.44 SINCE FILE ENTRY

STN INTERNATIONAL LOGOFF AT 09:47:24 ON 21 APR 2007